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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,938	12/29/2004	Keizo Iida	2004_1891A	5080

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EXAMINER

LEYKIN, RITA

ART UNIT	PAPER NUMBER
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2837

DATE MAILED: 11/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/519,938

Applicant(s)

ILDA, KEIZO

Examiner

Rita Leykin

Art Unit

2837

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>12/29/04</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 1, 3-7, and 9, 11-15, 17, 18 are rejected under 35 U.S.C. 102(a) as being anticipated by Yanashima et al. US # 2002/0140309.

Yanashima et al. teach a synchronous induction motor and drive unit installed in and hermetic electric compressor. The limitations of claim 1 and 9 regarding motor structure, such as main and auxiliary stator windings, rotor yoke with embedded permanent magnet and secondary conductor in vicinity of a periphery of the yoke, see [002].

In Fig. 54 and 56 Yanashima et al. show a starter circuit for motor 2 having starting capacitor 48, connected in series with auxiliary winding 7b and a switching unit 61 the switching operation described in [0226]-[0229];

With respect to claims 3-5 and 11-13, 17, 18, Yanashima et al. teach in [0233]-[0236] a bimetal switch 64 having positive temperature coefficient thermistor.

With respect to claims 6, 7, 14 and 15 in Fig. 56 Yanashima et al. show the relay 61 having coil 61a, that is connected in series with main winding 7a and a movable contact 61b, provided with a movable terminal connection and fixed terminal connection. The claimed description of the relay plunger is inherent.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2, 8, 10, 16, 19, and 20, are rejected under 35 U.S.C. 103(a) as being unpatentable over Yanashima et al. US # 2002/0140309 and Nacewicz et al. US # 5,617,001.

The limitations of base claims 1 and 9 have been addressed in the rejection above.

With respect to claims 2 and 10 Yanashima et al. do not teach presence of triac in the switching unit. However, Nacewicz et al. in Fig. 3 show ac motor starting control circuit utilizing trigger semiconductor switching device including triac Q1 and resistor Pa that is interpreted as a trigger circuit, according to applicant's disclosure on page 6, lines 25-27.

With respect to claims 8 and 16, 19, 20, Yanashima et al. teach in [0233]-[0236] a bimetal switch 64 having positive temperature coefficient thermistor.

Hence, it has been obvious to one of ordinary skills in the art, at the time invention was made to combine Nacewicz et al. teaching on utilizing of the trigger semiconductor switching device in form of a triac switch serially connected to the auxiliary winding of the motor and Yanashima et al. teaching on control of synchronous induction motor in an electric hermetic compressor including thermal protecting means in form of thermistor having positive temperature coefficient (PTC) of resistance

Art Unit: 2837

connected to the gate terminal of the triac for controlling the flow of triggering current and for cutting off the supply of current to the electric unit in response to a predetermined temperature rise.

The reason is to enable the automatic restarting of the motor.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rita Leykin whose telephone number is (571)272-2066. The examiner can normally be reached on Monday-Friday 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Martin can be reached on (571)272-2107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Rita Leykin
Primary Examiner
Art Unit 2837



R.L.